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REMARKS

Reconsideration is requested in view of the above amendments and the following remarks. Claims 1, 8, 11 and 21 have been revised. Support for the revisions can be found at, e.g., page 7, lines 10-24 and page 9, line 7 to page 10, line 2 of the specification, among other places. Claims 13-20 have been canceled without prejudice. Claims 1-12 and 21 remain pending in the application.

Claim Rejections – 35 USC § 102

Claims 1-12 and 21 are rejected under 35 USC § 102(b) as being anticipated by Kato et al. (US Patent No. 6,423,445) with Komori et al (US Publication No. 2002/0025472). Applicants respectfully traverse this rejection.

Claim 1 requires component fibers that comprise at least a portion of the polyolefin thermal bonding short fibers are bonded together, and at least a portion of the polyolefin thermal bonding short fiber is flattened. The present flattened fiber helps secure larger cavities in an inner portion of a nonwoven fabric. As a result, during a sulfonation treatment, it is easier for a reactive substance to accumulate in the inner portion and thus the sulfonation treatment can be performed more effectively and uniformly (see, e.g., Fig. 2 and page 6, lines 20-26 and page 9, line 7 to page 10, line 2 of the specification, among other places). In addition, the flattened fiber structure helps improve the tensile strength of the nonwoven fabric (see, e.g., Fig. 2 and page 6, lines 26-29 of the specification, among other places).

Kato et al. fail to disclose component fibers that comprise at least a portion of the polyolefin thermal bonding short fibers are bonded together, and at least a portion of the polyolefin thermal bonding short fiber is flattened, as required by claim 1. In fact, Kato et al. merely discuss a nonwoven fabric that is formed by fluid entanglement of a fiber web with a fluid jet, such as a water jet (see Kato et al., col. 8, line 53 to col. 9, line 12). Kato et al. are completely silent as to the flattened polyolefin thermal bonding short fiber of claim 1.

Moreover, Applicants respectfully submit that the feature of “polyolefin thermal bonding short fiber is flattened” is clearly a structural feature. Fig. 2 of the present

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application illustrates the flattened polyolefin thermal bonding short fiber in a surface layer portion of the nonwoven fabric. As discussed above, this feature is advantageous because 1) during a sulfonation treatment, it is easier for a reactive substance to accumulate in an inner portion of the nonwoven fabric and thus the sulfonation treatment can be performed more effectively and uniformly, and 2) this arrangement helps improve the tensile strength of the nonwoven fabric.

For at least these reasons, claim 1 is patentable over Kato et al. with Komori et al. Claims 2-12 depend ultimately from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

Claim 21 is patentable over Kato et al. with Komori et al. for reasons similar to those discussed above. Claim 21 requires component fibers that comprise at least a portion of the polyolefin thermal bonding short fibers are bonded together, and at least a portion of the polyolefin thermal bonding short fiber is flattened. Kato et al. fail to disclose such an arrangement as recited in claim 21. For at least these reasons, claim 21 is patentable over Kato et al. with Komori et al. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claims.

Claim Rejections – 35 USC § 103

Claims 1-12 and 21 are rejected under 35 USC 103(a) as being unpatentable over Kato et al. in view of Komori et al. Applicants respectfully traverse this rejection.

Claim 1 requires component fibers that comprise at least a portion of the polyolefin thermal bonding short fibers are bonded together, and at least a portion of the polyolefin thermal bonding short fiber is flattened. The present flattened fiber helps secure larger cavities in an inner portion of a nonwoven fabric. As a result, during a sulfonation treatment, it is easier for a reactive substance to accumulate in the inner portion and thus the treatment can be conducted more effectively (see, e.g., Fig. 2 and page 6, lines 20-26 and page 9, line 7 to page 10, line 2 of the specification, among other places). In addition, the flattened fiber structure helps form a nonwoven fabric that has

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an improved tensile strength on a desired surface area (see, e.g., Fig. 2 and page 6, lines 26-29 of the specification, among other places).

Kato et al. fail to teach or suggest such an arrangement as required by claim 1 for reasons discussed above in the remarks to the anticipation rejection. Komori et al. merely discuss a bag-like separator 12a that includes a nonwoven fabric formed of synthetic fiber treated to be hydrophilic (see Komori et al., paragraph [0028]). Komori et al. do not remedy the deficiencies of Kato et al. Therefore, the present record provides no teaching or suggestions of component fibers that comprise at least a portion of the polyolefin thermal bonding short fibers are bonded together, and at least a portion of the polyolefin thermal bonding short fiber is flattened, as required by claim 1.

For at least these reasons, claim 1 is patentable over Kato et al. with Komori et al. Claims 2-12 depend ultimately from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Claim 21 includes similar limitations of claim 1 concerning flattened polyolefin thermal bonding short fiber and is patentable for the reason discussed for claim 1.

Reconsideration and withdrawal of the rejections are respectfully requested.

Applicants note that the Office Action did not indicate whether the drawings are accepted or objected to. Applicants request that this be indicated in the next action from the Examiner.

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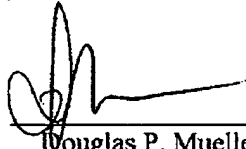
In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

Respectfully submitted,

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DPM/cy